U.S. Department of the Interior Bureau of Land Management White River Field Office 73544 Hwy 64 Meeker, CO 81641

# ENVIRONMENTAL ASSESSMENT

**NUMBER**: CO-110-2004-190 -EA

CASEFILE/PROJECT NUMBER (optional): COC 058705, COC 058704

**PROJECT NAME**: 2 APD's well # 23-16, well # 24-6

**LEGAL DESCRIPTION**: T1S., R104W., sec 23, 24

**APPLICANT**: Robert L. Bayless, Producer LLC

**ISSUES AND CONCERNS** (optional): No pipeline routes were submitted at this time.

# **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

#### Background/Introduction:

**Proposed Action**: Applicant is proposing to drill two gas wells which will include constructing pads and access roads. Total disturbance would be about 5.8 acres.

For well #23-16 the pad size is proposed at 150'X300' (.93 acres) and new access road for 2469' (2.84 acres). Total disturbance anticipated is 3.77 acres.

For well #24-6 the pad size is proposed at 150'X300' (.93 acres) and new access road for 952' (1.09 acres). Total disturbance anticipated is 2.02 acres.

**No Action Alternative:** The wells and access route would not be built; there would be no additional environmental impacts.

## **ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD**: none

**NEED FOR THE ACTION**: To respond to the request by applicant to exercise lease rights and develop hydrocarbon reserves.

<u>PLAN CONFORMANCE REVIEW</u>: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5

<u>Decision Language</u>: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

# <u>AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:</u>

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

# **CRITICAL ELEMENTS**

#### **AIR QUALITY**

Affected Environment: The entire White River RA has been designated as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II.

Environmental Consequences of the Proposed Action: The proposed action would result in short term, local impacts to air quality during construction, from fugitive dust being blown into the air.

Environmental Consequences of the No Action Alternative: Under the no action alternative, there would be no adverse affects on air quality.

*Mitigation*: Require dust abatement measures in the authorizing document.

#### **CULTURAL RESOURCES**

Affected Environment: Weaver Ridge 23-16 well pad and access road, Weaver Ridge 24-6 well pad and access road: The proposed well pad and new access road have been inventoried at

the Class III (100% pedestrian) level (Bond 2004, Compliance Dated 9/16/2004) with no new cultural resources identified in the proposed new construction area. (Note: access to the new construction is along the Gilsonite Ridge road which has seven sites identified on it. Any upgrading work on the Gilsonite Ridge road will require additional mitigation measures.)

*Environmental Consequences of the Proposed Action:* Weaver Ridge 23-16 well pad and access: the proposed action will not impact any known cultural resources (see above note). Weaver Ridge 24-6 well pad and access: the proposed action will not impact any known cultural resources (see above note).

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

#### **INVASIVE, NON-NATIVE SPECIES**

Affected Environment: The proposed project is within a burned pinyon/juniper woodland with shallow soils. Predominate species include; Indian ricegrass, mountain mahogany, beardless bluebunch and cheatgrass.

The two noxious weeds found in this area are halogeaton and cheatgrass. Both of these species are found throughout the area. Halogeaton has the ability to rapidly colonize disturbed areas, but is easily controlled by successful revegetation. Cheatgrass is found throughout the area, in all of the plant communities. This species can hinder reclamation because of its highly competitive nature. The proposed seed mix is native species which are adapted to the project area.

Environmental Consequences of the Proposed Action: With prompt control of any noxious weeds that occur on the project area there would not be any adverse impacts to the adjacent plant communities. Prompt reclamation would prevent cheatgrass and halogeaton from establishing.

Environmental Consequences of the No Action Alternative: There would be no impacts.

*Mitigation*: In accordance with Condition of Approval #179 from Appendix B of the White River ROD/RMP, application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

#### MIGRATORY BIRDS

Affected Environment: The project area consists primarily of lower elevation Wyoming big sagebrush shrublands interspersed among stands of predominantly younger age-class pinyon juniper woodlands. There are a number of migratory birds that fulfill nesting functions in these types from April through July, including several species identified as having higher conservation interest by the Rocky Mountain Bird Observatory, Partners in Flight program (i.e., green-tailed towhee, gray flycatcher, juniper titmouse, black-throated gray warbler). These and more common and generalized species associated with these habitats (e.g., house finch, chipping sparrow, lark sparrow, vesper sparrow, and spotted towhee) are widely represented at appropriate densities in extensive suitable habitats throughout the Resource Area.

Environmental Consequences of the Proposed Action: Construction and drilling/completion activities associated with these pads are scheduled to commence in October 2004 and be completed by December 2004. Based on this schedule, there would be no potential to disrupt the nesting activities of migratory birds. In the unlikely event that development activity extends into the breeding season, levels of nest disturbance associated with these pads would be discountable. Habitats affected by the two locations (i.e., 23-16 encompassed by a recent burn; 24-6 is sited on a narrow peninsula of younger age-class woodland and incorporates a portion of the burn) tend to reduce the probability of their sustaining strong nest densities, particularly those birds of higher conservation interest. If gas development activity were to extend into the nesting season, there would be a low probability of adversely affecting the

breeding activities of no more than 2 pair of higher interest species on the 24-6 location and no likelihood of affecting these species on the 23-16 location.

*Environmental Consequences of the No Action Alternative:* There would be no action authorized that would have potential to disrupt the breeding activities of migratory birds. Alternate actions would have similar or more substantive consequences as those discussed under the proposed action.

Mitigation: None

# THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed under the Endangered Species Act or included on BLM's sensitive species list that inhabit or derive important benefit from the area potentially influenced by the proposed action.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable affect on animals listed, proposed, candidate, or petitioned for listing under the Endangered Species Act. Similarly, there are no animals considered sensitive by BLM that would be potentially influenced by this action.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternative would have no effective influence on special status species or associated habitat and would, therefore, have no potential to influence the status of applicable land health standards.

#### WASTES, HAZARDOUS OR SOLID

Affected Environment: Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

*Environmental Consequences of the No Action Alternative:* No hazardous or other solid wastes would be generated under the no-action alternative.

*Mitigation*: The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

#### WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The table below correlates the proposed well to drainage locations. The listed drainages are tributary to the White River.

WELL NUMBER	DRAINAGE NAME
24-6	Cottonwood Creek
23-16	Weaver Canyon

Water quality data is not available for these upper reaches of Cottonwood Creek or Weaver Canyon. These segments of stream are considered to be ephemeral, which means they flows in direct response to winter snow melt and late summer/fall rainstorms. Water quality of precipitation is considered to be of good quality, but can be high is sediment depending on the magnitude and duration of the storm event.

Both streams are in segment 22, all Tributaries to the White River, including all wetlands, lakes and reservoirs, from a point immediately above the confluence with Douglas Creek to the Colorado/Utah border, except for specific listings in Segment 23.

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. This lease/allotment is in a Category 1, Priority 2, watershed (The Lower White) identified in the Unified Watershed Assessment report. The state has reasons to believe this watershed has water quality problems (sediment and salinity loads) that may impair the watershed.

The State has classified this stream segment as Aquatic Life Warm 1, Recreation 1a, Water Supply and Agriculture. The state has further defined water quality parameters with table values. These standards reflect the ambient water quality and define maximum allowable concentrations for the various water quality parameters. The anti-degradation rule applies to this segment meaning no further water quality degradation is allowable that would interfere with or become harmful to the designated uses.

Oil and Gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As industrial dischargers the applicant is required to obtain a permit authorizing the discharge of stormwater from these well pads and roads and show how the lessee will prevent sediment from entering the surrounding water ways.

Environmental Consequences of the Proposed Action: Fragile watersheds that have very high erosion potential (i.e. Cottonwood Creek) are frequently high in salts and can contribute to increased salinity loads to the White River and the Colorado River Basin. Depleting this vegetation cover needed to protect watersheds from raindrop impact and runoff could cause long-term erosion and water quality problems for Cottonwood Creek and on downstream. Although low water crossing are preferable to culverts it is recognized certain conditions do not warrant such a Best Management Practice (BMP). To help minimize impacts from the placement of the 6-8 foot culvert it is important to follow guidelines established in the BLM manual. In addition, use BMPs to re-establish the protective vegetative cover and to collect sediment during runoff events

*Environmental Consequences of the No Action Alternative:* Impacts from the no-action alternative are not anticipated.

*Mitigation*: Culverts should be designed and constructed according to the standards provided in BLM Manual 9112. The design, review and evaluation must be accomplished under the direct supervision of a registered professional engineer.

When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation. For the interim, if the topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile. Once construction is completed, reclaim as much of the pad that is not needed for maintenance of the well facility.

All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.

Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.

Eliminate undesirable berms that retard normal surface runoff. Fill material associated with construction of this project shall not be deposited in ephemeral draws adjacent to two of these wells.

Finding on the Public Land Health Standard for water quality: The water quality of Cottonwood Creek and Weaver Canyon is well within the criteria set by the state, thus meeting the land health standard. The proposed action will not change this status if the mitigation adhered to.

**WETLANDS AND RIPARIAN ZONES** (includes a finding on Standard 2)

Affected Environment: There are no wetlands or riparian communities potentially influenced by the proposed action. The nearest perennial water source is the White River which is located approximately 5 miles to the north of the proposed project area.

*Environmental Consequences of the Proposed Action:* Riparian and wetland communities would not be directly or indirectly affected by well construction.

*Environmental Consequences of the No Action Alternative:* There would be no immediate action authorized that would have potential to affect wetland or riparian communities.

Mitigation: None

Finding on the Public Land Health Standard for riparian systems: Because there are no riparian or wetland resources potentially influenced by the proposed or the no-action alternative, a land health standard finding is not relevant. As such, there would be no change in the land health status of downstream riparian and wetland communities.

#### CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, or Wild and Scenic Rivers, Wilderness, Threatened, Endangered or Sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

#### NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

#### **SOILS** (includes a finding on Standard 1)

Affected Environment: Baseline soils data have been collected for Rio Blanco County by the NRCS and are published in an order III Soil Survey. This survey is available for review from the White River Field Office. All of the proposed actions, access roads and well pads are in soil mapping unit # 73 which is the second most common soil type in the Resource Area. The Rentsac channery loam is typically found on 5 to 50 percent slopes.

These soils are shallow, well drained found on ridges, foothills, and side slopes. They have formed in residuum derived dominantly from calcareous sandstone. Areas are elongated and are 200 to 5,000 acres. The native vegetation is mainly pinyon, juniper, brush, and grasses.

Elevation is 6,000 to 7,600 feet. The average annual precipitation is 14 to 18 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 80 to 105 days.

Typically, as much as 2% of the surface is covered with stones. The surface layer is a grayish brown channery loam about 5 inches thick. The next layer is a very channery loam about 4 inches thick. Sandstone is at a depth of 16 inches. The soils are calcareous throughout. Permeability of this Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is moderate to very high. Revegetation limitations for these soil types include an arid climate and droughty soil condition. It is in Pinyon-Juniper woodland site.

Well 24-6, .4 miles of southern portion of access road and 23-16 as well its access road are on CSU-1, which indicates problems such as fragile soil, high salt concentrations, excessive erosion, or steep slopes. CSU-1 stipulation description states, surface-disturbing activities will be allowed only after the operator submits an engineered construction/ reclamation plan and approved by the Area Manager. The plan would address how soil productivity would be restored and how surface runoff would be treated to avoid accelerated erosion and mass wasting. Exceptions would be granted if after environmental analysis the proposed action did not fit the criteria identifying fragile soils on slopes greater than 35% or the disturbance would not result in any long-term decrease in site productivity or increased erosion.

Environmental Consequences of the Proposed Action: General impacts associated with oil and gas and road development include but are not limited to, loss of topsoil, soil compaction and possible increase in sediment loads to the White River. The primary surface-disturbing impact would be a potential increase in sediment transport from runoff events after the protective vegetative cover has been removed.

Because the road and well pads are in an area that has been identified as CSU-1, it is important to recognize the increased erosion potential and designing BMPs, which will minimize this erosion. The wells themselves are not on slopes greater than 35%, but the roads traverse slopes that are greater than 35% and based on the way they are designed will make a difference to erosion potential. Submitting a copy of the Stormwater Discharge Plan, which is required by the State (Stormwater Discharge Permit) identifying how BMPs will be used to reduce stormwater discharge and erosion off of the roads, could replace the construction/reclamation plan required by the BLM.

BMPs used to slow runoff, trap sediment and prepare reclaimed areas for seeding would also help reduce soil loss. With an explanation of how these BMPs will be used and implementation of these BMPs, impacts are expected to be short in duration, during the construction phase and for a short time after construction until successful reclamation is achieved.

*Environmental Consequences of the No Action Alternative:* Impacts are not anticipated from not permitting the proposed action.

*Mitigation*: Submit a copy of the Stormwater Discharge Plan, which is required by the State identifying how BMPs will be used to reduce stormwater discharge. Use Standard Seed

mix # 4 for the range site identified. In addition, the following COA from Appendix B, White River ROD/RMP as described below should be applied.

Seed Mix	Species (Variety)	Lbs PLS/ Acre	Range sites
4	Western wheatgrass (Rosanna) Pubescent wheatgrass (Luna)	2 3	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147
	Crested wheatgrass (Nordan) Orchardgrass (Paiute) Indian ricegrass (Nezpar)	2 1	(Mountain Mahogany)
	Fourwing saltbush (Wytana)	1	

Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.

When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff

Finding on the Public Land Health Standard for upland soils: Soils at the proposed location do not meet the criteria established in the Public Land Health Standard. The proposed action would not change this status.

#### **VEGETATION** (includes a finding on Standard 3)

Affected Environment: Project site for both wells is burned pinyon/juniper woodland with a good understory of grasses and shrubs. Predominate species include Indian ricegrass, beardless bluebunch, mountain mahogany and cheatgrass. The cheatgrass is not dominating the site.

Environmental Consequences of the Proposed Action: Reclamation measures proposed are adequate to revegetate the disturbed area. This area would have adequate vegetation cover to prevent erosion within three years. Over time the pinyon/juniper woodland would reestablish on the site and become the climax community. Establishment of seedlings is expected to occur in thirty years and development of a climax community would take 200-300 years.

Environmental Consequences of the No Action Alternative: No Impacts.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The plant communities on site meet the standard for healthy plant communities.

# **WILDLIFE, AQUATIC** (includes a finding on Standard 3)

Affected Environment: The proposed locations are at least five miles from perennial systems capable of supporting aquatic communities (see Wetlands and Riparian Zones section above).

Environmental Consequences of the Proposed Action: Separated by at least 5 miles of ephemeral channel, there is no reasonable likelihood that aquatic habitats associated with downstream perennial systems would not be influenced by proposed well and road construction.

*Environmental Consequences of the No Action Alternative:* There would be no immediate action authorized that would have potential to affect wetland or riparian communities. Although alternate locations could be presented under this alternative, they would probably be as unlikely to involve aquatic resources as the proposed action.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Because there are no aquatic habitats or animals potentially influenced by the proposed or no-action alternatives, a land health standard finding is not applicable. The proposed and no action alternatives would have no measurable influence on aquatic habitats associated with downstream systems (see Wetlands and Riparian Zones section above).

#### **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

Affected Environment: All pad locations were inspected by BLM biologists for evidence of raptor nesting activity on 5 October 2004. The proposed 24-6 location is sited on a narrow ridgeline and encompasses a small extension of a 10-year old burn. Indian ricegrass and rubber rabbitbrush form the dominant ground cover. Cheatgrass occurs at the site but is not dominant. Pinyon-juniper woodlands occur on the margin of the proposed location, however, these woodlands provide little suitable nesting habitat for woodland raptors (i.e., narrow stringer of predominantly submature trees), and no raptor nests were located during on-site surveys. The 23-16 location is situated high on a recently burned woodland slope. Ground cover conditions at this site are similar to those at well 24-6 (native bunchgrasses with sparse shrub canopies of rubber rabbitbrush, Mormon tea, and mountain mahogany). Originating from an existing road in the bottom, access to this pad involves a relatively lengthy traverse of the burned slope, but there appears to be no reasonable alternative route from the ridgeline road above. Small-diameter residual pinyon-juniper trees occurring within the burn provide little suitable substrate for cavity development. Moreover, a stunted, open-canopied woodland on an adjoining south-

facing slope contains few larger-diameter trees and provides little suitable nesting habitat for raptors. No raptor nests were found here during on-site surveys.

The proposed wells are encompassed by general winter ranges of deer and elk. These ranges sustain relatively low density big game use from November through early May. Although browse use in the project area indicates relatively low density or short duration winter deer use, the burn surrounding the 23-16 location has attracted substantial winter elk use. Current road densities are moderate (1.5-2.5 miles per square mile) in the project vicinity and generally meet the road density objectives established in the White River ROD/RMP (i.e., road densities of 3 miles/square mile on big game ranges, White River ROD/RMP, page 2-29).

Non-game wildlife using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action.

Environmental Consequences of the Proposed Action: Site disturbance during well and road construction and drilling/completion operations would temporarily displace local use of forage resources by big game, particularly elk. Because access to the 23-16 location parallels an existing road in open grassland cover, no long-term effects to established large-scale patterns of seasonal use are expected. Long term occupation of these lands and the reduction in the herbaceous and woody forage base for big game (about 6 acres) would be discountable at the landscape level. Similarly, the loss of forage and cover for non-game animals would be negligible.

Big game habitat disuse and elevated energy demands attending road proliferation and increasing off-road vehicle use received prominent attention in the White River ROD/RMP. Although access required for these pads would be relatively small and would not add appreciably to local road density, further extension of this route to the southwest may involve substantial intrusion into wooded big game winter range parcels. As a means of reducing long-term impacts to local deer and elk herds and meeting road density objectives established in the White River ROD/RMP (i.e., road densities of 3 miles/square mile on big game ranges, White River ROD/RMP, page 2-29), it is recommended that general public access to the 23-16 location be restricted in the event further access originates from this road.

Environmental Consequences of the No Action Alternative: No immediate action would be authorized that would involve the adverse modification of terrestrial wildlife habitats. Alternate pad locations may be increasingly likely to be situated more distant from established roads, thereby involving more extensive access needs and more extensive direct and indirect involvement of functional big game, raptor, and non-game habitat.

*Mitigation*: In the event access for additional pad locations originates from the 23-16 access, it is recommended that vehicular use on this road be restricted by installing a lockable gate at a location that would effectively deter bypass as near the intersection of the 23-16 access road and the existing Weaver Canyon road as possible. It is intended that access would remain restricted throughout the year and available only to authorized use associated with natural gas development and BLM administration.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The project area presently meets the public land health standards for terrestrial animal communities. As conditioned, the proposed action would have negligible long term influence on the utility or function of big game, raptor, or non-game habitats surrounding these wells. In an overall context, lands affected by the no-action or proposed action would continue to meet the land health standard for terrestrial animals

<u>OTHER NON-CRITICAL ELEMENTS</u>: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not	Applicable or Present, No Impact	Applicable & Present and Brought Forward for
	Present	Tresent, No impact	Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management		X	
Forest Management		X	
Geology and Minerals			X
Hydrology/Water Rights	X		
Law Enforcement		X	
Paleontology			X
Rangeland Management		X	
Realty Authorizations			X
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

#### ACCESS AND TRANSPORTATION

*Affected Environment*: Rio Blanco County Road 114 and BLM road 1220 will be affected by the proposed action.

Environmental Consequences of the Proposed Action: An increase of traffic would be expected to occur while these pads are being constructed. Traffic to the pads will be less frequent prior to pad completion. Pads provide no additional public access to public lands.

*Environmental Consequences of the No Action Alternative:* None.

Mitigation: None.

#### **GEOLOGY AND MINERALS**

Affected Environment: The surface geologic formation of the proposed wells is Green River. Bayless's targeted zone 1 is in the Mancos. These wells are located on federal oil and gas leases COC-58704 and COC-58705. During drilling potential water, coal, oil and gas zones will be encountered from surface to the targeted zone.

Environmental Consequences of the Proposed Action: The cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, water, and oil between formations. Coal zones located in the Mesaverde will also be isolated during this procedure. Development of these wells will deplete the hydrocarbon resources in the targeted formation

*Environmental Consequences of the No Action Alternative:* The oil and gas resources of the targeted zones would not be fully developed.

Mitigation: None

#### **PALEONTOLOGY**

Affected Environment: Weaver Ridge 23-16 well pad and new access road: the proposed new construction is located in an area mapped as the Parachute Creek member of the Green River Formation (Tweto 1979) which the BLM has classified as a Condition I formation meaning it is a known producer of scientifically important fossil resources.

Weaver Ridge 24-6 well pad and new access road: the proposed new construction is located in an area mapped as the Parachute Creek member of the Green River Formation (Tweto 1979) which the BLM has classified as a Condition I formation meaning it is a known producer of scientifically important fossil resources.

Environmental Consequences of the Proposed Action: Weaver Ridge 23-16 well pad and new access road (pipeline?): if it becomes necessary to excavate into the underlying bedrock formation to build the road, level the well pad or excavate the reserve/blooie pit there is a high potential to impact scientifically important fossil resources.

Weaver Ridge 24-6 well pad and new access road: if it becomes necessary to excavate into the underlying bedrock formation to build the road, level the well pad or excavate the reserve/blooie pit there is a high potential to impact scientifically important fossil resources.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to fossil resources under the No Action Alternative.

*Mitigation*: Weaver Ridge 23-16 well pad and new access road: 1. Any exposed outcrops of rock/bedrock in the project must be examined by an approve paleontologist with a report detailing the results of the inventory and any recommended mitigation must be submitted to the BLM prior to initiation of construction.

2. If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the access road, level the well pad or excavate the reserve/blooie pit a paleontological monitor shall be present at the time of all excavation work.

Weaver Ridge 24-6 well pad and new access road: 1. Any exposed outcrops of rock/bedrock in the project are must be examined by an approve paleontologist with a report detailing the results of the inventory and any recommended mitigation must be submitted to the BLM prior to initiation of construction

2. If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the access road, level the well pad or excavate the reserve/blooie pit a paleontological monitor shall be present at the time of all excavation work.

#### **REALTY AUTHORIZATIONS**

Affected Environment: Off lease access will require a right-of-way from the Rabbit Mountain Road. An Encana pipeline (COC49128) parallels the main access road. A short segment of the access road in T.2S R. 103W sec. 6 crosses private land.

Environmental Consequences of the Proposed Action: The access will be authorized by a ROW, serialized as COC68238. Applicant will be responsible for contacting existing ROW holders to co-ordinate usage.

Environmental Consequences of the No Action Alternative: If the wells are not drilled, no access will be constructed or authorized.

*Mitigation*: Colorado One Call shall be activated before any earth moving begins.

#### RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas and the surrounding Cottonwood Creek area has been delineated a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 6 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment. As these proposed wells are located to new existing well pads, it could be suggested that the ROS class is moving towards a more developed state which resembles Roaded Natural (RN).

*Environmental Consequences of the No Action Alternative*: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

#### VISUAL RESOURCES

Affected Environment: The proposed action is located in a Visual Resource Management (VRM) Class 2 area. The objective of this class is to retain the existing characteristic landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: Wells 23-16 and 24-6 would be drilled in an area of existing oil and gas disturbance. Existing locations are located near the top of the ridge line; there are no routes in the area located above the road leading to these existing locations. The route traveled by a casual observer would be in the bottom of Cottonwood Draw, which, in elevation, is well below the Gilsonite Hills and approximately four miles to the east. By utilizing low profile production facilities and painting these facilities Juniper Green, the facilities would blend in with and mimic the existing vegetation. The level of change to the existing landscape would be low and any changes would not attract the attention of the casual observer. The standards for VRM II classification would be retained.

Environmental Consequences of the No Action Alternative: None

*Mitigation:* Use low profile production facilities and paint all production facilities Juniper Green.

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development,

including the proposed action, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

#### REFERENCES CITED

#### Bond, Mark C

Cultural Resource Inventory of the Proposed Weaver Ridge 23-16 and Weaver Ridge
 Well Locations and Access Routes for Robert I. Bayless, Producer, Rio Blanco
 County, Colorado. Montgomery Archaeological Consultants, Moab, Utah.

## Tweto, Ogden

1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia

#### PERSONS / AGENCIES CONSULTED: None

# **INTERDISCIPLINARY REVIEW:**

Name	Title	Area of Responsibility
Carol Hollowed	P & EC	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Robert Fowler	Forester	Invasive, Non-Native Species
Brett Smithers	Wildlife Biologist	Migratory Birds
Brett Smithers	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Carol Hollowed	P & EC	Water Quality, Surface and Ground Hydrology and Water Rights
Brett Smithers	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	ORP	Wilderness
Carol Hollowed	P & EC	Soils
Robert Fowler	Forester	Vegetation
Brett Smithers	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	ORP	Access and Transportation
Ken Holsinger	NRS	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Robert Fowler	Forester	Rangeland Management
Linda L Jones	Realty Specialist	Realty Authorizations
Chris Ham	ORP	Recreation
Chris Ham	ORP	Visual Resources
Valerie Dobrich	NRS	Wild Horses

# Finding of No Significant Impact/Decision Record (FONSI/DR)

# CO-110-2004-190EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**<u>DECISION/RATIONALE</u>**: It is my decision to approve the development of this project as described in the proposed action, with the mitigation measures listed below. This development, with mitigation, is consistent with the decisions in the White River ROD/RMP, and environmental impacts will be minimal.

**MITIGATION MEASURES**: 1. Require dust abatement measures in the authorizing document.

- 2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone,

with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

- 4. Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.
- 5. The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.
- 6. Submit a copy of the Stormwater Discharge Plan, which is required by the State identifying how BMPs will be used to reduce stormwater discharge. Culverts should be designed and constructed according to the standards provided in BLM Manual 9112. The design, review and evaluation must be accomplished under the direct supervision of a registered professional engineer.
- 7. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation. For the interim, if the topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile. Once construction is completed, reclaim as much of the pad that is not needed for maintenance of the well facility.
- 8. All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.
- 9. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.
- 10. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.
- 11. Eliminate undesirable berms that retard normal surface runoff. Fill material associated with construction of this project shall not be deposited in ephemeral draws adjacent to two of these wells.
- 12. In the event access for additional well locations originates from the 23-16 access, it is recommended that vehicular use on this road be restricted by installing a lockable gate at a location that would effectively deter bypass as near the intersection of the 23-16 access road and the existing Weaver Canyon road as possible. It is intended that access would remain restricted throughout the year and available only to authorized use associated with natural gas development and BLM administration.
- 13. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

- 14. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.
- 15. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff
- 16. Weaver Ridge 23-16 well pad and new access road: All exposed outcrops of rock/bedrock in the project are must be examined by an approve paleontologist with a report detailing the results of the inventory and any recommended mitigation must be submitted to the BLM prior to initiation of construction.
- 17. Weaver Ridge 26-6 well pad and new access road: All exposed outcrops of rock/bedrock in the project are must be examined by an approve paleontologist with a report detailing the results of the inventory and any recommended mitigation must be submitted to the BLM prior to initiation of construction
- 18. For both wells, if at any time it becomes necessary to excavate into the underlying bedrock formation to construct the access road, level the well pad or excavate the reserve/blooie pit a paleontological monitor shall be present at the time of all excavation work.
- 19. Use Standard Seed mix # 4 for the range site identified. In addition, the following COA from Appendix B, White River ROD/RMP as described below should be applied.

Seed Mix	Species (Variety)	Lbs PLS/ Acre	Range sites
4	Western wheatgrass (Rosanna)	2	Gravelly 10"-14", Pinyon/Juniper
	Pubescent wheatgrass (Luna)	3	Woodland, Stony Foothills, 147
	Crested wheatgrass (Nordan)	2	(Mountain Mahogany)
	Orchardgrass (Paiute)	1	
	Indian ricegrass (Nezpar)	1	
	Fourwing saltbush (Wytana)	1	

NAME OF PREPARER: Commana Meagley

NAME OF ENVIRONMENTAL COORDINATOR: Carrline P. Halburd 1914/04

SIGNATURE OF AUTHORIZED OFFICIAL

Field Manager

DATE SIGNED: 10/14

ATTACHMENTS: Location map of the proposed action.

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